

REMARKS

This Amendment is filed in response to the Office Action mailed April 9, 2007. All objections and rejections are respectfully traversed.

Claims 1-33 are pending in the case.

Claims 1-33 have been amended to better claim the invention.

No claims have been added.

Claim Rejections - 35 U.S.C. §101

At paragraph 3 of the Office Action, claims 5, 6, 16, 17, 26, 27, 32 and 33 were rejected under 35 U.S.C. §101 as non-statutory. Such rejection appears to be related to certain “if” statements in the claims and what happens if certain conditions called for by the “if” statements are not met.

The Applicant respectfully requests reconsideration of this rejection. Claims 5, 6, 16, 17, 26, 27, 32, and 33 are dependent claims that depend from clearly statutory independent claims 1, 13, 22, and 28. That is, claims 1, 13, 22, and 28 are directed to subject matter other than a §101 Judicial Exception (i.e. are direct to more than just “abstract ideas (such as mathematical algorithms), natural phenomena, and laws of nature are not eligible for patent protection”), and/or, to the extent they may be directed to a §101 Judicial Exception, represent a practical application that “(A) ‘transforms’ an article or physical object to a different state or thing; or (B) otherwise produces a useful, concrete and tangible result, based on the factors discussed below.” See MPEP §2106(IV)(C).

Claims 5, 6, 16, 17, 26, 27, 32 and 33 provide certain additional limitations to those of the independent claims, and some of these additional limitations include a condition. However, even if some of the conditions are not met, the claims remain statutory as the steps and/or structures in the independent claims are still there, and in and of themselves are sufficient to make the claims statutory. Thus, the Applicant respectfully urges

that the claims are statutory when considered as a whole, i.e. when one looks to all the limitation of the claims, and the limitation of the claims from which they depend.

Claim Rejections - 35 U.S.C. §102

At paragraphs 4-13 of the Office Action, claims 1-4, 9, 12, 22-25 and 28-31 were rejected under 35 U.S.C. §102(b) over Aggarwal et al., U.S. Patent No. 6,275,508 (hereinafter Aggarwal).

The Applicant's claim 1, representative in part of the other rejected claims, sets forth:

I. A method for modifying data transferred from a source to a destination, the method comprising the steps of:
reading one or more instructions, by a processor, each instruction indicating an operation to modify the data;
generating, in response to the one or more instructions, one or more commands wherein each command is associated with the operation to modify the data;
placing the commands in a data structure;
initiating transfer of data from the source to the destination; and
performing, by a device operating independently from the processor, the operations associated with the commands contained in the data structure to modify the data as directed by the commands as the data is transferred from the source to the destination.

Briefly, Aggarwal discloses a technique for processing L2 headers with special high speed L2 header processing circuits, rather than use a general purpose processor, which Aggarwal suggests would operate too slowly, (*see* col. 1, lines 61-64), the entire processing operation is performed by the special processing circuits. First, Input FIFOs (*see* Fig. 1) supply data to the special L2 header processing circuits (*see* Fig. 1, Sequencer Unit and L2 Header Unit) which process each byte of the data in parallel (*see* col. 4, lines 35-43 and Fig. 2). The special processing circuits read and execute instructions from a Write Control Store (WSC), coupled thereto. *See* col. 3, lines 61-63, col. 4, lines 51-54 and col. 10, lines 17-29 and Fig. 1. Finally, processed L2 headers are sent to Output FIFOs. *See* Fig. 1.

The Applicant respectfully urges that Aggarwal is silent concerning the Applicant's claimed *"reading one or more instructions, by a processor, each instruction indicating an operation to modify the data"* and *"generating, in response to the one or more instructions, one or more commands wherein each command is associated with the operation to modify the data"* and *"placing the commands in a data structure"* and *"performing, by a device operating independently from the processor, the operations associated with the commands contained in the data structure to modify the data as directed by the commands as the data is transferred from the source to the destination"*

In contrast to the scheme disclosed in Aggarwal, which eschews involvement of a processor in favor of special L2 high speed header processing circuits, the Applicant claims a technique that involves a processor. In the Applicant's technique, some functionality is performed by a processor, while other functionality is offloaded to an assisting device, for example a data mover. In this manner, the processor is assisted, not replaced.

Specifically, the Applicant claims in representative claim 1 *"reading one or more instructions, by a processor, each instruction indicating an operation to modify the data."* Aggarwal, in contrast, makes no mention of a processor reading instructions from Aggarwal's WSC, but instead discusses that the instructions pass directly from the WSC to the special L2 header processing circuits. Indeed, Aggarwal disparages use of a processor commenting they are too slow and therefore inappropriate for the types of packet processing Aggarwal contemplates. *See* Aggarwal col. 1, lines 61-64.

As Aggarwal does not read the instructions by a processor, the reference rapidly diverges from the Applicant's claims. For example, the Applicant goes on to claim *"generating, in response to the one or more instructions, one or more commands wherein each command is associated with the operation to modify the data"* and *"placing the commands in a data structure."* Aggarwal, lacks any suggestion of this. In Aggarwal, instructions read from the WSC are simply executed when they are read, not used to generate commands that are then placed in data structures. Indeed, there appears to be no structure in Aggarwal which may fairly be likened to the Applicant's *commands*. That is, while the Examiner may liken Aggarwal's instructions stored in the WSC to the Ap-

plicant's instructions, no structures remain in Aggarwal that may be likened to the Applicant's claimed *commands*.

Finally, the Applicant also claims *“performing, by a device operating independently from the processor, the operations associated with the commands contained in the data structure to modify the data as directed by the commands as the data is transferred from the source to the destination.”* As Aggarwal does not suggest commands separate from instructions, this aspect of the Applicant's claims is also not shown.

Accordingly, for the above reasons, the Applicant respectfully urges that Aggarwal is legally insufficient to anticipate the present claims under 35 U.S.C. §102.

Claim Rejections - 35 U.S.C. §102

At paragraphs 14-17 of the Office Action, claims 5, 26, and 32 were rejected under 35 U.S.C. §103(a) over Aggarwal in view of Ueno, U.S. Patent Application No. 2002/0009050 (hereinafter Ueno).

Claims 5, 26, and 32 are dependent claims that depend from independent claims believed to be allowable. Claims 5, 26, and 32 are believed to be allowable due in part to such dependency.

At paragraphs 18-29 of the Office Action, claims 7, 8, 10, 11, 13-15, and 18-21 were rejected under 35 U.S.C. §103(a) over Aggarwal in view of Deforche et al., U.S. Patent Application No. 2005/0232303 (hereinafter Deforche).

As for claims 7, 8, 10 and 11 the Applicant notes these claims are dependent claims that depend from independent claim 1, which is believed to be allowable. Accordingly, claims 7, 8, 10 and 11 are believed to be allowable due in part to such dependency.

Claim 13 is an independent claim, and claims 14-15 and 18-21 depend there from. In rejecting claim 13, the Examiner simply states that “[a]s per claim 13, it is rejected for similar reasons as stated above in claims 1 and 11.” Claims 1 and 11 were rejected under 102(b) over only Aggarwal, while claim 13 is apparently rejected under 103(a) over Aggarwal in view of Deforche. Yet, the rejection makes no mention of how Deforche has

any relation to claim 13, or how it should be combined with Aggarwal, thus leaving the Applicant with little ability to respond specifically to this rejection.

Accordingly, the Applicant respectfully requests clarification. To the extent Aggarwal is the basis of the rejection, the Applicant respectfully refers the Examiner to the discussion of representative claim 1 above.

Similarly the Applicant respectfully requests clarification as to claims 14-15 and 18-21 that depend from claim 13.

At paragraphs 18-29 of the Office Action, claims 7, 8, 10, 11, 13-15, and 18-21 were rejected under 35 U.S.C. §103(a) over Aggarwal in view of Deforche in further view of Ueno.

Claim 16 is a dependent claim that depends from an independent claim believed to be allowable. Accordingly, claim 16 is also believed to be allowable due in part to this dependency.

Should the Examiner believe a telephonic interview would be helpful in the disposition of this Application, the Examiner is encouraged to call the undersigned attorney at (617) 951-2500.

In summary, all the independent claims are believed to be in condition for allowance and therefore all dependent claims that depend there from are believed to be in condition for allowance. The Applicant respectfully solicits favorable action.

Please charge any additional fee occasioned by this paper to our Deposit Account
No. 03-1237.

Respectfully submitted,



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